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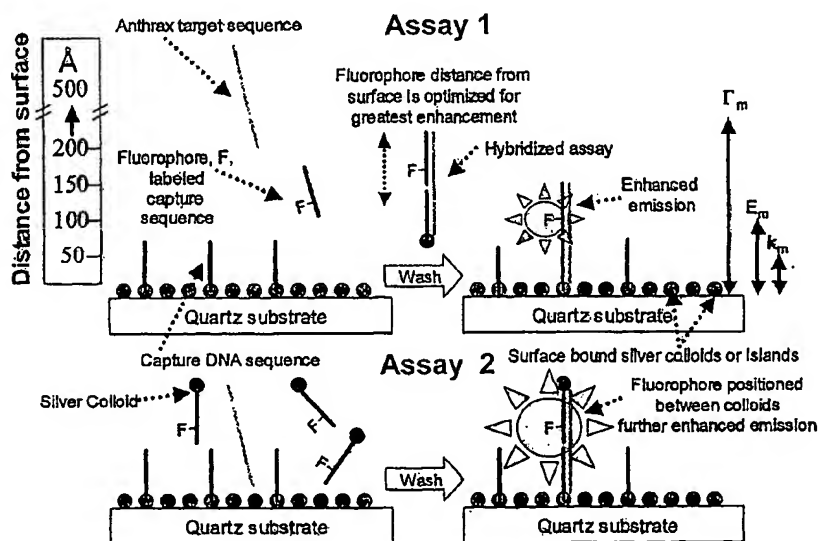
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(54) Title: **HIGH-SENSITIVITY ASSAYS FOR PATHOGEN DETECTION USING METAL-ENHANCED FLUORESCENCE**



(57) **Abstract:** The present invention relates to an assay including a surface having silver colloids or islands attached thereto. Attached to the surface and/or silver colloids/islands are polynucleotides which are complementary to a target polynucleotide sequence. The assay is performed by adding the target polynucleotide sequence to the assay surface and allowed to hybridize with the capture polynucleotides. Fluorophore-labeled capture polynucleotides are added and hybridize to the target polynucleotide. Bound target polynucleotides are detected by metal enhanced fluorescence.